

1 **CLAIMS**

2 1. A method comprising:

3 receiving a video information stream including color information formatted  
4 according to a first color space sampling format a pre-determined number of bits;

5 splitting the color information into a base information stream formatted  
6 according to a second color space sampling format having less than the pre-  
7 determined number of bits and into an enhanced information stream; and

8 providing an indicator with at least one of the base information stream and  
9 the enhanced information stream that indicates a capability for providing video  
10 information according to the first color space sampling format or the second color  
11 space sampling format.

12

13

14

15

16

17

18

19

20

21

22

23

24

25

1           2.    The method of claim 1, further comprising encoding the enhanced  
2 information stream using spatial information related to the base information  
3 stream.

4           3.    The method of claim 1, further comprising selectively encoding the  
5 enhanced information stream using spatial information related to the base  
6 information stream or using a previous reference related to the enhanced  
7 information stream.

8           4.    The method of claim 1, further comprising encoding the base  
9 information stream into a base encoded bit stream, encoding the enhanced  
10 information stream into an enhanced encoded bit stream, and combining the base  
11 encoded bit stream and the enhanced encoded bit stream into an output bit stream.

12          5.    The method of claim 4, wherein the output bit stream comprises an  
13 interleaved stream of the enhanced encoded bit stream and the base encoded bit  
14 stream.

15          6.    The method of claim 4, wherein the output bit stream comprises a  
16 concatenated stream of the enhanced encoded bit stream and the base encoded bit  
17 stream.

18          7.    The method of claim 6, wherein the enhanced encoded bit stream  
19 follows the base encoded bit stream.

20          8.    The method of claim 4, wherein the output bit stream comprises a  
21 first file for the enhanced encoded bit stream and a second file for the base  
22 encoded bit stream.

23          9.    The method of claim 1, wherein the color information includes  
24 chrominance blocks.  
25

1       **10.**    The method of claim 1, wherein the first color space sampling  
2   format comprises a YUV422 format and the second color space sampling format  
3   comprises a YUV420 format.

4       **11.**    A computer-readable medium having computer-executable  
5   instructions, the instructions comprising:

6       converting a first multimedia format into a base stream and an enhanced  
7   stream, the base stream corresponding to another multimedia format and the  
8   enhanced stream including information that when combined with the base stream  
9   re-constructs the first multimedia format.

1       **12.**   The computer-readable medium of claim 11, wherein the  
2 multimedia format comprises an encoded video format.

3       **13.**   The computer-readable medium of claim 11, wherein converting the  
4 first multimedia format into the base stream and the enhanced stream comprises  
5 storing chrominance blocks associated with the other multimedia format in the  
6 base stream and storing the chrominance blocks that are not associated with the  
7 other multimedia format in the enhanced stream.

8       **14.**   The method of claim 11, further comprising encoding the base  
9 stream into a base encoded bit stream, encoding the enhanced stream into an  
10 enhanced encoded bit stream, and combining the base encoded bit stream and the  
11 enhanced encoded bit stream into an output bit stream.

12       **15.**   The method of claim 14, wherein the output bit stream comprises an  
13 interleaved stream of the enhanced encoded bit stream and the base encoded bit  
14 stream.

15       **16.**   The method of claim 14, wherein the output bit stream comprises a  
16 concatenated stream of the enhanced encoded bit stream and the base encoded bit  
17 stream.

18       **17.**   The method of claim 16, wherein the enhanced encoded bit stream  
19 follows the base encoded bit stream.

20       **18.**   The method of claim 14, wherein the output bit stream comprises a  
21 first file for the enhanced encoded bit stream and a second file for the base  
22 encoded bit stream.

23       **19.**   A device comprising:  
24       a base encoder for encoding a base information stream formatted according  
25 to a first color space sampling format; and

1 an enhanced encoder for encoding an enhanced information stream that  
2 contains color space information unavailable in the first color space sampling  
3 format.

4 **20.** The device of claim 19, wherein the enhanced encoder encodes the  
5 enhanced information using spatial information related to the base information  
6 stream.

7 **21.** The device of claim 19, further comprising an output stream  
8 formulator that combines the encoded enhanced information stream and the  
9 encoded base information stream into an output stream.

10 **22.** The device of claim 21, wherein the output stream comprises the  
11 encoded enhanced information stream interleaved with the encoded base  
12 information stream.

13 **23.** The device of claim 21, wherein the output stream comprises the  
14 encoded enhanced information stream concatenated to the encoded base  
15 information stream.

16 **24.** The device of claim 21, wherein the output stream comprises a first  
17 file containing the encoded enhanced information stream and a second file  
18 containing the encoded base information stream.

19 **25.** The device of claim 24, wherein device comprises a digital video  
20 camera.

21 **26.** A device comprising:  
22 a base decoder for decoding an encoded base bit stream associated with a  
23 first color space sampling format; and  
24  
25

1 an enhanced decoder for decoding an encoded enhanced bit stream that  
2 contains color space information unavailable in the first color space sampling  
3 format.

4 **27.** The device of claim 26, wherein the enhanced decoder decodes the  
5 encoded enhanced bit stream using spatial information related to the encoded base  
6 bit stream.

7 **28.** The device of claim 26, further comprising a compositor for  
8 generating a second color space sampling format from the encoded enhanced bit  
9 stream and the encoded base bit stream.

10 **29.** The device of claim 26, wherein the device comprises a set-top box.

11 **30.** A device comprising:

12 an input for receiving video information;

13 a circuit for formatting part of the video information according to a color  
14 space sampling format and formatting another part of the video information  
15 according to another format; and

16 a circuit for storing the part of the video information and the other part of  
17 the video information.

18 **31.** The device of claim 30, wherein the circuit for formatting comprises  
19 a programmable circuit.

20 **32.** The device of claim 30, wherein the circuit for storing comprises a  
21 programmable circuit.

22 **33.** The device of claim 30, wherein the input comprises a sensor.

23 **34.** The device of claim 30, wherein the input comprises at least one  
24 CCD array.